

## Section II Production

### Chapter 4

---

## Architectural Analysis and Cost Processing

#### 4.1

#### General

##### A. Qualifications of Lender's Third Party Representatives

1. Architectural Reviewer – See Lender's Architectural Reviewer and Cost Analyst's Statement of Work – New Construction, Substantial Rehabilitation, and 241(a), Section I.A (available on the Section 232 Program website).
2. Cost Analyst - See Lender's Architectural Reviewer and Cost Analyst's Statement of Work – New Construction, Substantial rehabilitation, and 241(a), Section I.B (available on the Section 232 Program website).
3. Needs Assessor – See Project Capital Needs Assessment (PCNA) Statement of Work – 223(f), Section I, and PCNA Statement of Work – 223(a)(7), Section I (both are available on the Section 232 Program website).

##### B. Required Architectural Services for Design and Supervision - See Lender's Architectural Reviewer and Cost Analyst's Statement of Work – New Construction, Substantial Rehabilitation, and 241(a), Exhibit C.

##### C. Architectural Standards and Other Criteria

1. HUD's Minimum Property Standards, Handbook 4910.1
2. Accessibility Standards (See Section 4.1 D below)
3. Seismic Resistance Requirements. Seismic Resistance for Substantial Rehabilitation and Existing Projects pursuant to Section 223(f). Structures in seismic zones 3 and 4 must meet three fourths (3/4) of the seismic force level resistance contained in FEMA-310, Handbook for the Seismic Evaluation of Buildings – A Pre-standard,

FEMA-356, Pre-standard and Commentary for the Seismic Rehabilitation of Buildings, and FEMA-274, NEHRP Commentary on the Guidelines for Seismic Rehabilitation of Buildings.

- a. A seismic hazard analysis of the building(s) must be made by a registered engineer familiar with lateral force design, where applicable code requirements at the time of construction did not equal or exceed the referenced seismic standards.
- b. The evaluation must include an examination of the structure for continuity, ductility, and resistance to lateral forces.
- c. Structural elements and connections between elements must be strengthened and new elements installed as required, if the existing structure does not provide three fourths (3/4) of the seismic force level resistance required by paragraph A above.

Note: New construction seismic standards are dictated by local code.

4. Energy Efficiency Requirements. For New Construction or Substantial Rehabilitation, the project design must meet or exceed the requirements of the 2006 International Energy Conservation Code (IECC) (or later versions adopted by the Secretary of HUD), or in the case of care facility high rises (defined as structures of 4 or more stories), the requirements of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 90.1 – (1989 for substantial rehabilitation and 2004 (or later versions as adopted by the Secretary of HUD) for new construction), and shall be cost-effective with respect to construction and operating costs on a life-cycle cost basis. HUD, in cooperation with the Environmental Protection Agency and the Department of Energy, has adopted a wide ranging energy action plan for improving energy efficiency in all housing programs, which includes encouraging program participants to use Energy Star products.
5. Department of Health & Human Services, Centers for Medicare & Medicaid Services, final rule entitled, “Medicare and Medicaid Programs; Fire Safety Requirements for Long Term Care Facilities, Automatic Sprinkler Systems.”
6. Subsurface Exploration (Soil Investigation). Before foundation design and application for Firm commitment, reliable information about subsurface conditions and foundation recommendations must be made available to the Lender’s analyst by the borrower.
  - a. The Architect must advise the Borrower of the scope and type of soils information and/or subsurface investigation required for structural design.
  - b. The Borrower must provide the services of a registered design professional for determining subsurface conditions. These services shall be provided in accordance with the Owner-Architect Agreement.

- 81 c. The Lender's architectural analyst will assure that the architect has  
82 comprehensive, well documented soils information and that project  
83 foundation design follows the report recommendations. When necessary, the  
84 Lender's architectural analyst may request engineering help in reviewing soil  
85 reports and related designs.  
86 d. Soils investigation shall be in accordance with Chapter 18 of the International  
87 Building Code, except that an investigation and report is required for every  
88 project involving new construction, whether or not required by the building  
89 official.  
90

91 See PCNA Statement of Work – 223(f); Lender's Architectural Reviewer and Cost  
92 Analyst's Statement of Work – New Construction, Substantial Rehabilitation, and 241(a);  
93 and PCNA Statement of Work – 223(a)(7), for a full list and details of requirements and  
94 standards.  
95

#### 96 D. Accessibility for Persons with Disabilities 97

- 98 1. See Accessibility Matrix for Section 232 (available on the Section 232 Program  
99 website. Direct link:  
100 <http://portal.hud.gov/hudportal/documents/huddoc?id=AccessMatrixSec232.docx> ),  
101 for guidance on the applicability of the Fair Housing Act (FHA), Uniform Federal  
102 Accessibility Standards (UFAS) to implement Section 504 of the Rehabilitation Act  
103 of 1973, and the Americans with Disabilities Act (ADA), as they relate to  
104 Purchase/Refinance, New Construction, and Substantial Rehabilitation loans), and  
105  
106 2. See Lender's Architectural Reviewer and Cost Analyst's Statement of Work – New  
107 Construction, Substantial Rehabilitation, and 241(a), Section III.A.1.e., for further  
108 details Section IV.A.1.c., for more details, including accessibility for the vision or  
109 hearing impaired, and residential accommodation kitchens. Please see direct link  
110 here: <http://portal.hud.gov/hudportal/documents/huddoc?id=LenArCsReSOW.docx>.  
111

#### 112 E. HUD Labor ~~Relations~~ Standards and Enforcement Protocol 113

114 Applicable when Davis-Bacon wage rates apply as indicated in Production Chapter 2. See  
115 Appendix 4.1, HUD Labor Standards and Enforcement ~~Relations~~ Protocol, for procedures  
116 during:  
117

- 118 1. Firm Commitment Processing,  
119 2. Initial Closing Clearance,  
120 3. Construction Phase, and  
121 4. Final Closing Clearance.  
122

## 4.2

## Section 232 New Construction, Substantial Rehabilitation, 241(a) Supplemental Loans, and Blended Rate

### A. Lender Processing

1. Architectural Reviewer – See Lender’s Architectural Reviewer and Cost Analyst’s Statement of Work – New Construction, Substantial Rehabilitation, and 241(a), Sections III.A, and IV.A and B.
2. Cost Analyst - See Lender’s Architectural Reviewer and Cost Analyst’s Statement of Work – New Construction, Substantial Rehabilitation, and 241(a), Sections III.B, and IV.C and D.

### B. ORCF Underwriter Review

The following areas shall be reviewed:

1. check for complete Plans and Specifications;
2. compliance with the Fair Housing Accessibility Guidelines (FHAG), and Part 504 of the Rehabilitation Act of 1973 (also known as Section 504) and the Uniform Federal Accessibility Standards (UFAS);
3. if the project is in compliance with regulatory requirements regarding number of full bathrooms per resident (if the project is an ALF or BC);
4. Reserve for Replacement (R4R) Funding Schedule (for Sub-Rehab where they are adding units to an existing project);
5. existing R4R Account (for 241(a) Supplemental Loans);
6. General Contractor’s Overhead; and
7. Owner-Architect Agreement, to confirm it is complete and correct.

## 4.3

## Section 232 Substantial Rehabilitation

### A. Definition – Substantial Rehabilitation

A project qualifies as a substantial rehabilitation project when:

1. ~~€~~The hard costs of repairs, replacements, and improvements (not including major movable equipment) exceed 15% of the project's value after completion of all repairs, replacements, and improvements. Additions (new construction outside the existing building footprint) that are adding units are processed as Blended Rate. Additions (new construction outside the existing building footprint) that do not include new units are permitted in substantial rehabilitation projects, but the costs of the addition are not included in the eligibility test; OR
2. Two or more major building components are being substantially replaced. The component must be significant to the building and its use, normally expected to last the useful life of the structure, and not minor or cosmetic. Substantially replaced means that at least 50% of the component must be replaced. Examples of major building components are: roof structures, wall or floor structures, foundations, plumbing systems central heating systems, air conditioning systems and electrical systems. An example related to a roof replacement is as follows: major building components: roof sheathing, rafters, framing members; minor building components: shingles or built-up roofing.

NOTE: Estimates for determining the cost for substantial rehabilitation must include general requirements and fees for contractor's general overhead and profit, bond premium, borrower's and contractor's other fees and design architect and supervisory architect. However, when determining the *eligibility* of Section 232/223(f) projects, include only the repair costs; do not add general requirements and fees.

- B. Joint Inspection. See Lender's Architectural Reviewer and Cost Analyst's Statement of Work – New Construction, Substantial Rehabilitation, and 241(a), Exhibit F for details.

## 4.4

## Section 232/223(f) Refinance

### A. Lender Processing

1. Needs Assessor – See PCNA Statement of Work – 223(f)

2. **Timing:** The effective date of the PCNA should be the date the Needs Assessor inspected the subject property. For 223(f) refinances the PCNA is to be submitted to ORCF by the Lender within 180 days of the PCNA's effective date. Expired reports must either be updated or granted a waiver through consultation with the ORCF.

B. ORCF Underwriter Review

The following areas shall be reviewed:

1. PCNA: Check for changes to repair conclusions. Has the Lender suggested a lower dollar amount or fewer repairs than the Needs Assessor's repair conclusions?
2. Check for repair inspectability. Are the repairs clearly described in terms of inspectability (location and what the need is)?
3. Verify Fair Housing Accessibility Guidelines (FHAG) and Section 504 compliance.
4. Review R4R Funding Schedule. Has the Lender supplied an acceptable R4R Funding Schedule showing a positive account balance through year 15?

## 4.5

## Section 232/223(a)(7) Refinance

A. Lender Processing

1. Needs Assessor – See PCNA Statement of Work – 223(a)(7)

4.2. Timing: The effective date of the PCNA should be the date the Needs Assessor inspected the subject property. For 223(f) refinances the PCNA is to be submitted to ORCF by the Lender within 180 days of the PCNA's effective date. Expired reports must either be updated or granted a waiver through consultation with the ORCF.

B. ORCF Account Executive / Asset Manager Review

The following areas shall be reviewed, if a PCNA is required and submitted:

1. PCNA: Check for changes to repair conclusions. Did the Lender address the status of all deficiencies from last REAC Inspection?
2. Check for repair inspectability. Are the repairs clearly described in terms of inspectability (location and what the need is)?
3. Verify FHAG and Section 504 compliance.
4. Has the Lender supplied a R4R Funding Schedule (showing all funding needs, and a proposed Initial and Annual Deposit) that shows a positive Reserve balance in years 1 – 15?

5. Has the Lender's Underwriter justified any deviations from the third Party PCNA?

DRAFT